

(c) comparing the level of said p63 gene product in said patient sample with the level of said p63 gene product in a control sample of cells;

B1b C2J wherein a lower level of said p63 gene product in said patient sample as compared to the control sample is indicative of the presence of malignant carcinoma.

B2 M2J 4. (Amended) A method of claim 2, wherein said control sample is selected from the group comprising basal epithelial cells, immature squamous cells, ME 180, sub-columnar reserve cells and human foreskin keratinocytes.

6. (Amended) A method for detecting cancer in tissues containing sub-columnar reserve cells, comprising:

(a) obtaining a tissue sample from a patient;

(b) determining the level of a p63 gene product in said patient sample;

(c) comparing the level of said p63 gene product in said patient sample with the level of said p63 gene product in a control sample of cells;

B3 M2 wherein a lower level of said p63 gene product in said patient sample as compared to the control sample is indicative of the presence of cancer in said tissues.

10. (Amended) A method for distinguishing cervical squamous carcinoma from cervical small cell undifferentiated carcinoma, comprising:

(a) obtaining a cervical tissue sample from a patient;

(b) determining the level of a p63 gene product in said patient sample;

(c) comparing the level of said p63 gene product in said patient sample with the level of said p63 gene product in a control sample of cervical squamous carcinoma cells;

B4 M2 wherein a decrease in the level of said p63 gene product in said patient sample as compared to the control sample is indicative of small cell undifferentiated carcinoma.

15. (New) The method of claim 2, wherein said p63 gene product is selected from the group consisting of TAp63 α , TAp63 β , TAp63 γ , Δ Np63 α , Δ Np63 β and Δ Np63 γ .

16. (New) The method of claim 10, wherein the level of said p63 gene product is determined by a method selected from the group comprising RT-PCR, immunoblotting, immunoprecipitation, and sandwich immunoassay.

17. (New) The method of claim 10, wherein said p63 gene product is selected from the group consisting of TAp63 α , TAp63 β , TAp63 γ , Δ Np63 α , Δ Np63 β and Δ Np63 γ .

18. (New) A method for distinguishing benign prostate lesions from malignant prostate lesions, comprising:

(a) obtaining a prostate tissue sample from a patient;

(b) determining the level of a p63 gene product in said patient sample;

(c) comparing the level of said p63 gene product in said patient sample with the level of said p63 gene product in a control sample of basaloid prostate cells;

wherein a decrease in the level of said p63 gene product in said patient sample as compared to the control sample is indicative of small cell undifferentiated carcinoma.

19. (New) The method of claim 18, wherein the level of said p63 gene product is determined by a method selected from the group comprising RT-PCR, immunoblotting, immunoprecipitation, and sandwich immunoassay.

20. (New) The method of claim 19, wherein said p63 gene product is selected from the group consisting of TAp63 α , TAp63 β , TAp63 γ , Δ Np63 α , Δ Np63 β and Δ Np63 γ .

21. (New) The method of claim 19, wherein the level of said p63 gene product in said patient sample is at least 2000-fold lower than the level of p63 gene product in said control sample.